

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.  | FILING DATE     | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|--|-----------------|----------------------|---------------------|------------------|
| . 09/739,034   | 12/14/2000      | Werner Obrecht       | Mo-5842/LeA 34,092  | 4130             |
| •  | 7590 06/20/2007 | · .                  | EXAMINER            |                  |
| LANXESS CORPORATION 111 RIDC PARK WEST DRIVE PITTSBURGH, PA 15275-1112 |                 | ·                    | SERGENT, RABON A    |                  |
|  |                 |                      | ART UNIT            | PAPER NUMBER     |
|  |                 |                      | 1711                |                  |
|  | •               |                      | MAIL DATE           | DELIVERY MODE    |
|  |                 |                      | 06/20/2007          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| • • •  |  | Application No.  | Applicant(s)   |
|--|--|--|--|
|  |  | 09/739,034   | OBRECHT ET AL.   |
| Office Action Summary  |  | Examiner   | Art Unit   |
|  |  | Rabon Sergent  | 1711   |
| Period fo  | The MAILING DATE of this communication app<br>or Reply   | ears on the cover sheet with the c   | orrespondence address  |
| A SH<br>WHI(<br>- Exte<br>after<br>- If NO<br>- Failu<br>Any | ORTENED STATUTORY PERIOD FOR REPLY CHEVER IS LONGER, FROM THE MAILING DANSIONS of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. O period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI | N.<br>nely filed<br>the mailing date of this communication.<br>D. (35 U.S.C. § 133). |
| Status   |  |  |  |
| -  | Responsive to communication(s) filed on <u>21 M.</u> This action is <b>FINAL</b> . 2b) This Since this application is in condition for allowar closed in accordance with the practice under E  | action is non-final.<br>nce except for formal matters, pro   |  |
| Disposit   | ion of Claims  |  |  |
| 5)□<br>6)⊠<br>7)□  | Claim(s) <u>8-10 and 23-32</u> is/are pending in the a 4a) Of the above claim(s) is/are withdraw Claim(s) is/are allowed.  Claim(s) <u>8-10 and 23-32</u> is/are rejected.  Claim(s) is/are objected to.  Claim(s) are subject to restriction and/or   | vn from consideration.   |  |
| Applicati  | ion Papers   |  |  |
| 10)  | The specification is objected to by the Examine The drawing(s) filed on is/are: a) access Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction to the oath or declaration is objected to by the Examine.  | epted or b) objected to by the Edrawing(s) be held in abeyance. See ion is required if the drawing(s) is obj   | e 37 CFR 1.85(a).<br>ected to. See 37 CFR 1.121(d).                                  |
| Priority ι   | ınder 35 U.S.C. § 119  |  |  |
| a)l  | Acknowledgment is made of a claim for foreign  All b) Some * c) None of:  1. Certified copies of the priority documents  2. Certified copies of the priority documents  3. Copies of the certified copies of the priority application from the International Bureau  See the attached detailed Office action for a list of   | s have been received. s have been received in Application ity documents have been received (PCT Rule 17.2(a)).   | on No ed in this National Stage  |
|  |  |  |  |
|  |  | •  |  |
| 2) 🔲 Notic   | t(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08)  | · 4) Interview Summary<br>Paper No(s)/Mail Da<br>5) Notice of Informal Pa  | te   |
|  | r No(s)/Mail Date  | 6) Other:  | · · · · · · · · · · · · · · · · · · ·  |

- 1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 21, 2007 has been entered.
- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 8-10 and 23-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Obrecht et al. ('488) or DE 19701487, each in view of Dammann et al. ('531) or JP 57-212239 or JP 5-17630.

The primary references disclose rubber mixtures comprising double bond containing rubber and crosslinked rubber particles having applicants' claimed properties, wherein the mixtures are useful for producing vulcanisates and molded articles. See abstract; column 1, lines

Application/Control Number: 09/739,034

Page 3

Art Unit: 1711

31+; columns 2 and 3; and column 4, lines 49-59. See abstract and page 4, line 3 within DE 19701487. Though the primary references are silent regarding the addition of a polyisocyanate component to the composition, the use of polyisocyanates within rubber mixtures to improve physical properties was known at the time of invention. This position is supported by the teachings of the secondary references. The secondary references disclose that polyisocyanate containing rubber formulations display excellent moldability and bonding resistant to heat and humidity. See abstracts.

- Therefore, it would have been obvious to incorporate polyisocyanates within the rubber mixtures of the primary references, so as to produce rubber compositions having the improved moldability and bonding characteristics taught by the secondary references. This position is bolstered by the fact that it has been held that it is *prima facie* obvious to utilize a known component for its art recognized purpose. *In re Linder*, 173 USPQ 356. *In re Dial et al.*, 140 USPQ 244.
- 5. Applicants' arguments have been considered; however, they are insufficient to overcome the prior art rejection. Applicants' primarily argue that since the relied upon secondary references, Dammann et al. and JP 5-17630, are drawn to adhesives and the secondary reference, JP 57-212239, is not drawn to a vulcanate, there is no motivation to combine the references or to rely upon the teachings of the secondary references to employ an isocyanate within the compositions of the primary references. In response, with respect to the argument that Dammann et al. and JP 5-17630 are inapplicable since they are drawn to adhesives, the position is taken that applicants have failed to establish that the claimed vulcanates and adhesives are mutually exclusive. It would seem that all moldable compositions, prior to cure, would have an

Art Unit: 1711

adhesive property and, once cured, it is logical to conclude that adhesives would lack an adhesive or tacky property or have a significantly reduced adhesive property. Furthermore, it is specifically noted that Dammann et al. recite that curatives may be used at column 3, lines 47-51 and that one of these curatives is sulfur, a known vulcanizing agent. Furthermore, given the use of polyisocyanates and components containing active hydrogen groups, the position is taken, depending on the functionality of the reactants, that one would reasonably expect the composition of JP 5-17630 to be crosslinked or vulcanized once cured. Therefore, applicants have by no means established that the secondary references do not encompass vulcanates, once the adhesives are cured. With respect to the argument that JP 57-212239 does not disclose a vulcanate, applicants are directed to lines 1 and 2 of the abstract, wherein it is clearly recited that the composition exhibits high dynamic modulus after vulcanization. Clearly, this reference encompasses vulcanized materials and moldings. Accordingly, the position is maintained, given the similarities of the respective compositions and the teachings within the secondary references, that one of ordinary skill in the art would have been motivated to incorporate isocyanates within the compositions of the primary references.

Any inquiry concerning this communication should be directed to R. Sergent at telephone number (571) 272-1079.

R. Sergent June 16, 2007